

PROJECT NUMBER: 2304, 2305, 4015
PROJECT TITLE: New Product Development
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PERIOD COVERED: July, 1988

I. MARLBORO/MARLBORO LIGHTS MENTHOL

- A. Objective: (1) Develop Marlboro Menthol to appeal more to Salem smokers. (2) Develop a Marlboro Lights Menthol brand extension to appeal to Salem Lights smokers.
- B. Status: National retail sales in progress since 2/1/88. Menthol monitoring continues.

POL tests #2148 (Salem Lights vs Marlboro Lights Menthol) and #2149 (Salem Lights vs Marlboro Lights Menthol with 1X menthol in filter) were completed. Marlboro Lts. Menthol achieved parity with Salem Lts. among Salem Lts. smokers. HTI testing of the same cigarettes showed no significant differences in preference, but the results were directionally in favor of Salem Lts.

Field pick-ups are being planned for menthol-in-smoke and subjective testing. PED is studying the best way to accomplish this.

C. Plans:

Monitor National Prod. Start-up
Field Pick-ups

On-going
Aug./Sept.

II. MARLBORO ULTRA LIGHTS

- A. Objective: To develop 85/100 mm Ultra Low (6 mg) candidates for Marlboro line extensions.
- B. Status: Results for POL 4424 (Merit Ultra Lights 85mm vs Half Pint 85mm) are complete. There was no significant difference between the two cigarettes for acceptability or preference ratings by the smoker groups tested (Merit Ultra Lights 85mm, Merit 85mm, Marlboro Lights 85mm, Winston Lights 85mm, or Winston Ultra Lights 85mm). Ratings on the attribute scales tested indicated that Merit 85mm smokers rated Half Pint 85mm higher on strength, off-taste, throat impact, mouthcoating, amount of smoke, amount of tobacco taste, like a full flavor cigarette, and amount of aftertaste. Merit Ultra Lights, Winston Ultra Lights, Winston Lights, and Marlboro Lights 85mm smokers did not rate the two cigarettes different for any of the attribute scales.

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Results for POL 7164 (Merit Ultra Lights 100mm vs Half Pint 100mm) indicate that Merit Ultra Lights 100mm smokers rated the Merit Ultra Lights cigarette higher on acceptability and preference; Merit 100mm smokers preferred the Half Pint 100mm cigarette; and Winston Lights 100mm smokers preferred the Merit Ultra Lights 100mm cigarette. The Merit Ultra Lights 100mm smokers rated Half Pint 100mm higher on the attribute scales of strength and off-taste; Winston Lights 100mm smokers rated the Half Pint model as faster burning.

Preliminary specifications for both the 85mm and 100mm products have been drafted.

Models to evaluate an updated LDB-2 (20% expanded) and revised LDB-2 blend (25% expanded) for puff count reduction were produced. Further work is necessary. The current Marlboro Lts. candidate is scheduled to be tested vs. Marlboro Lts. Germany (6mg.) and PMSL Germany. In addition, MUL will be tested against these products. This testing will be done among LTS smokers only.

C. Plans:

Puff Count Modifications/New Blend Evaluation
Factory Trial/Ad/Pack Testing
Test Market

8/88
Sept./Oct.
1st Qtr.'89

III. PROJECT TRIM (Ultra Slim)

- A. Objective: To develop 17 mm circumference/100 mm Ultra Slim product candidates.
B. Status:

TRIM I:

Results from POL 7174 (Capri Regular vs. Trim I Regular) showed no significant differences in acceptability or preference. However, some attribute differences were detected. Additional flavor work has been done to reduce the harshness of Trim I. The menthol Trim I POL #9088 cigarettes are not scheduled to be made at this time due to the additional work being done on Trim I nonmenthol.

TRIM IV: (Low Sidestream)

Ad/Pack results have been released for Elan Regular and Menthol, and B&H Select Thins Regular and Menthol. The 10-047-A paper (4.7% succinate, perforated) was used for all of these products.

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Results from the Internal MC panel indicated no significant differences in acceptability, strength and off-taste between cigarettes made with 10-047-A paper and 2132-83 (4.7% succinate, .3% new CMC, and .5% MAP) paper. The 10-047-A paper was rated higher in added flavor. Due to these results, KC has been requested to make a mill run of 2132-83 paper for further POL testing.

Lowest acceptable OV and menthol equilibration study results indicate 11.3% OV is the lowest acceptable OV.

C. Plans:

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|----------------------------|------------|
| Additional POL Testing | Aug./Sept. |
| Test Market Specifications | TBD |
| Factory Start-Up | TBD |
| Test market | TBD |

IV. PROJECT ART

- A. Objective: To investigate methods to decrease the nicotine content in tobacco. To develop full-flavored, ultra low, and light products using the low nicotine tobacco products.
- B. Status: The results of the extended internal PED test of an 11mg ART vs Marlboro Lights are encouraging. The ART model was found to be not significantly different from Marlboro Lights for nontobacco taste and mouthcoating. The ART model was higher in unusual flavor and off-taste and lower in strength, satisfaction and acceptability than Marlboro Lights. However, the shape of the acceptability curve from first cigarette first pack to last cigarette third pack was not as steep as earlier ART models tested in this format.

11mg menthol extended use testing is being scheduled.

Flavor development continues on the 6, 8, 11, and 16mg tar models (menthol and non-menthol) to increase the acceptability of the extracted samples. Several casings and aftercuts have been developed and are presently being evaluated. CR chemicals are also being evaluated. Investigations are underway testing the subjectives of menthol (natural vs. synthetic vs. combination of both) and the absorption of volatile aromatic components on the ART filler.

Cigarette design development for Full Flavor, Lights and Ultra Low Tar continues. Expanded ART filler is being used to optimize the puff count on Lights and Ultra Low designs.

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C. Plans:

Product/Flavor Development
 Internal Testing - Menthol
 Test Market ?

On-going
 Aug./Sept.
 1st Qtr. '89

V. PROJECT NATURALA. Objective:

Phase I

To develop "All Natural" cigarette candidates with no additives to the tobacco.

B. Status: PMI production rejected because of spots. To be remade under different operating parameters.

POL testing of three natural blends at 8 to 9 mg tar (Flush CA Filter) to be shipped week of 8/1/88. Recessed testing to follow with same parameters.

100% blend component cigarettes to be made week of 8/1/88 to help determine cause of spotting.

KC anti-spotting papers using disodium phosphate, PVA, and inner liners on order.

C. Plans:

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|---------------------------------|----------------|
| Spotting Tests (100% Component) | Week of 8/1/88 |
| POL Results (8-9 Flush Filter) | 9/15/88 |
| Make Recessed POLS | 8/88 |
| Study Anti-Spotting Papers | 8/88 |

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VI. PROJECT EXTRAA. Objective: The development of 4-8 mg product candidates that have the subjective taste of products with twice the tar.B. Status: CR chemicals continue to be subjectively evaluated. Results of the 12-month storage study of Super Juice II showed little change in the organic components at room temperature. A report will be issued.

Puff profiles of competitive market brands is completed. Will be updated as needed.

Additional casing and aftercut studies for the all lamina blend in a low density rod configuration are planned.

Work has begun on a free-standing 6mg product.

C. Plans:

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|--------------------------------------|--------------|
| Evaluate paper/ca filter variability | 3rd Qtr. '88 |
| Evaluate alternate filters | On-going |
| Puff profile | On-going |
| Low density rod program | On-going |

VII. PROJECT 202

A. Objective: To develop a 2-3mg "Merit-type" cigarette.

B. Status: This is a spin-off of the Extra Project.

Three monadic POL tests were shipped in July. These tests are as follows: 1) #0158 - modified Half Pint blend with 25% expanded, Half Pint casings and AC, paper/CA dual filter, and white tipping; 2) #0159 - same as #0158 except it will have cork-on-white tipping; and 3) #0160 - PMSL blend with PMSL casings and AC.

Paper filter components from Intertaba have been received and were used for the POL tests. Paper filters from Filtrona have been requested and will be evaluated when they arrive.

Also under evaluation are an All Natural blend and a 50% expanded blend. Two new flavor systems are presently being made in Semi-works on the modified Half-Pint blend.

Awaiting receipt of PMU and PMSL from Europe. These will also be tested on the monadic Mapping Panel.

C. Plans:

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|----------------------------------|----------|
| Receive PMU and PMSL | 8/88 |
| Additional 202 POL Candidates | 8/88 |
| Results from POL's 0158-0160 | 9/18 |
| Evaluation of Filters and Blends | On-going |

VIII. PROJECT VALUE ENTRY

A. Objective: To develop products to compete in the Value Entry Categories

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B. Status:**Alpine**

Test market in progress. HTI testing (5079/10145) of Alpine Lights vs Salem Lights were remade the week of 6/6/88 and have passed subjective screening. The Salem Lights 100's were reordered due to low FTC tar results. These cigarettes have been received and submitted for analytical smoking.

Continue blend development to replace MB4B filler with a lower cost blend.

Target

POL 4439 (Target Lts. vs. Cambridge Lts.) shipped 6/15/88. Scheduled close-out is 8/11/88.

POL 3592 (Target FF vs. Cambridge) O.K. subjectively, but being rechecked for FTC Tar. Possible shipping date if remake is unnecessary - week of 8/8/88.

C. Plans:

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|--|---------|
| Complete Lts. POL | 8/11/88 |
| Ship Full Flavor (If remake unnecessary) | 8/8/88 |
| Ad/Pack Testing/Factory Trial | On-hold |

IX. B&H KING SIZE

A. Objective: To develop a B&H 83mm box product with comparable subjectives of B&H 100 in both a full flavor and lights version, both nonmenthol and menthol.

B. Status: Baseline work has begun with the request of two nonmenthol mapping POL's which consist of B&H filler made to 85mm specs.

C. Plans:

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|--------------------------|-------------|
| Nonmenthol Mapping POL's | 8/88 |
| Blend and flavor work | On-going |
| Test Market | 1st Qtr.'89 |

X. MARLBORO BLEND REFORMULATION

A. Objectives: To remove off shore tobacco from Marlboro blend.

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B. Status:

POL's 3584 (Phase IX with modified casings vs current production Marlboro) and 3585 (Phase IX vs current production Marlboro) shipped 7/1/88 and 7/12/88. POL's 3577 and 3578 (Phase IX's vs Winston) to be shipped week of 8/8/88. Phase IX replicates and Phase X testing to be made week of 8/1/88. Phase X will also be tested against a current production Marlboro and Winston.

C. Plans:

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|--------------------------------------|--------|
| Results of Phase IX vs Marlboro | Aug. |
| Ship Phase IX vs Winston | 8/8/88 |
| Make Phase IX replicates and Phase X | 8/1/88 |

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